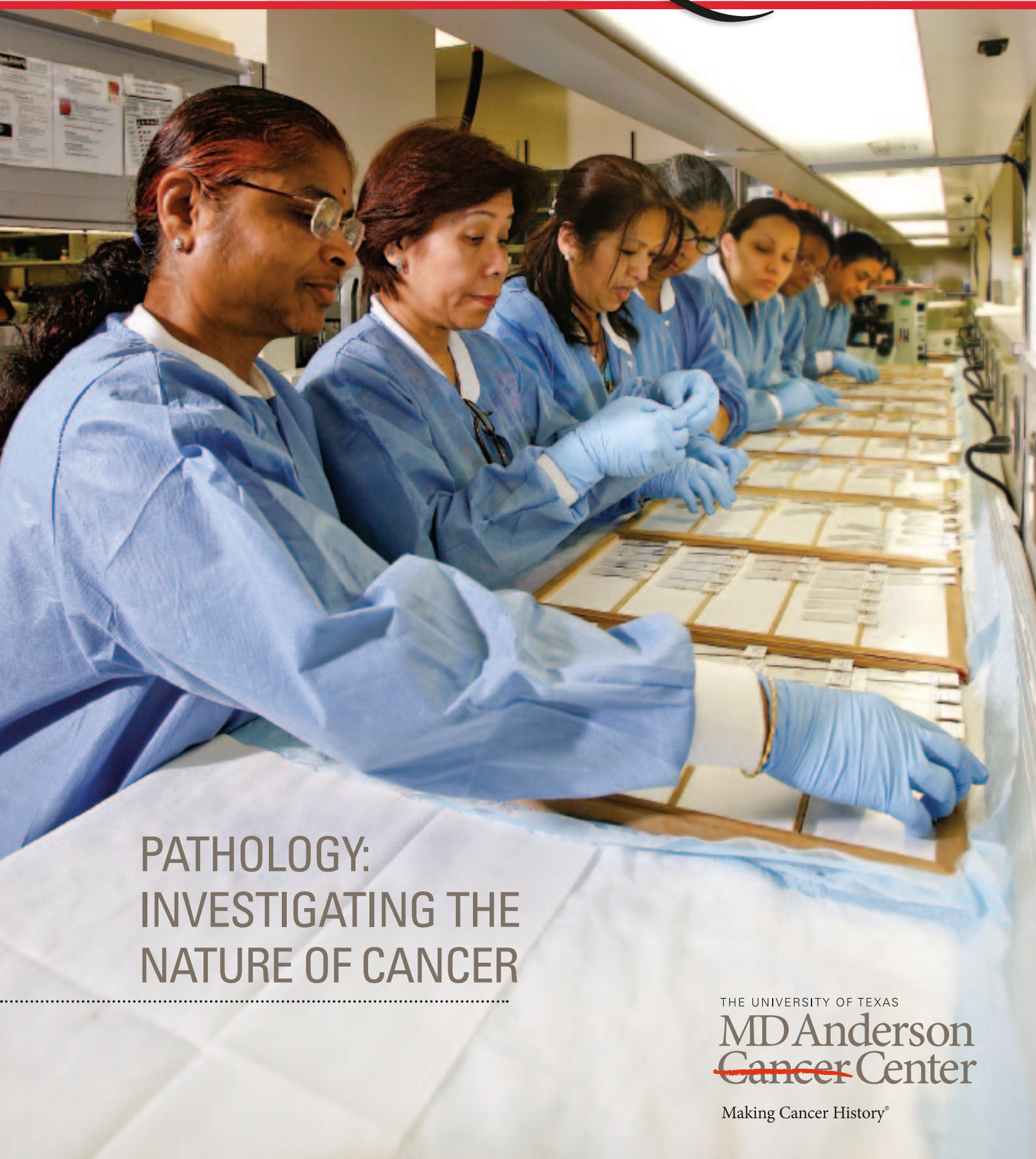


SPRING 2010  
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# CONQUEST



PATHOLOGY:  
INVESTIGATING THE  
NATURE OF CANCER

THE UNIVERSITY OF TEXAS  
**MD Anderson**  
**Cancer Center**

Making Cancer History®

## MISSION

The mission of The University of Texas MD Anderson Cancer Center is to eliminate cancer in Texas, the nation, and the world through outstanding programs that integrate patient care, research and prevention, and through education for undergraduate and graduate students, trainees, professionals, employees and the public.

## VISION

We shall be the premier cancer center in the world, based on the excellence of our people, our research-driven patient care and our science.

We are Making Cancer History®.

## CORE VALUES

### Caring

By our words and actions, we create a caring environment for everyone.

### Integrity

We work together to merit the trust of our colleagues and those we serve.

### Discovery

We embrace creativity and seek new knowledge.



**On the cover: Preparing tissue slides to load into the BondMax Stainer, which runs up to 250 types of tests, are clinical histology technicians (from left) Vijaya Chitturi, Eraida De Lara, Bella Mercado, Lakshmi Chaliki, Hilda Hinojosa, Loubertha (Ann) Stevens, Raman Surapaneni and Karla Valencia; Raju Nandagiri, Billy Hampton and Linda Bernal are not pictured.**



A Comprehensive Cancer  
Center Designated by the  
National Cancer Institute

VISIT THE CONQUEST INTERNET SITE  
AT [WWW.MDANDERSON.ORG/CONQUEST](http://WWW.MDANDERSON.ORG/CONQUEST)

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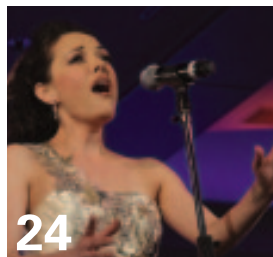
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# What's in a name?

## Making Cancer History®

By David Berkowitz

For nearly 70 years, MD Anderson has been defined by a single, powerful idea — to eliminate cancer.

It inspires everyone who works at the institution. It captures the essence of what we do. It's our mission.

With this issue of Conquest, we're introducing MD Anderson's new logo, which integrates this mission into the institution's name. The red line striking through the word "Cancer" translates the "Making Cancer History®" tagline into a dramatic visual signature.

The logo is central to MD Anderson's brand, which is how other people perceive our institution and what we do, and encompasses all the attributes that make us distinctive.

"We want to be the first choice for patients and their families, as well as for talented faculty and staff," says John Mendelsohn, M.D., president of MD Anderson. "We also want to be at the top of the list for physicians who can recommend us, donors whose support is essential, volunteers who give tirelessly, and students and trainees who aspire to be leaders in our field.

"The new logo is a visual demonstration of our commitment to our mission. We are proud that we've built tremendous momentum in cancer research and care. Every patient and research project teaches us more about how we can help eliminate cancer.

### How we've changed, through the years

This isn't the first time that MD Anderson has experienced a logo or name change. Here's a quick look at the institution's identity over the past seven decades.

**1941:** Established by the Texas Legislature as the Texas State Cancer Hospital and the Division of Cancer Research.



**1942:** Renamed M. D. Anderson Hospital for Cancer Research of The University of Texas to honor support from the M. D. Anderson Foundation.



**1955:** A year after moving into permanent quarters in the Texas Medical Center, the name was changed to The University of Texas M. D. Anderson Hospital and Tumor Institute at Houston.

“Our trademark for nearly a decade, the red line drawn through cancer is now incorporated into our very name to create a distinctive logo that tells not only who we are, but also what we do,” Mendelsohn says. “Our dream is that five years from now when people anywhere see a strike through cancer, they will immediately associate it with MD Anderson and ‘Making Cancer History.’”

The updated logo soon will begin appearing in many venues, including on MD Anderson’s Internet site, signage, vehicles and printed materials. A coordinated approach has been developed for the visual identity of all MD Anderson locations and relationships, including regional care centers and other collaborative interactions in the United States and internationally. Programs such as the Children’s Cancer Hospital and Children’s Art Project also will reflect the new look in their logos.

To learn more about the topic, check online at [www.mdanderson.org/logo](http://www.mdanderson.org/logo).

If you would like to share your thoughts on our new logo, please e-mail Conquest managing editor Sandi Stromberg at [sfstromb@mdanderson.org](mailto:sfstromb@mdanderson.org).

**1972:** UT System reorganization led to establishment of The University of Texas System Cancer Center, with components including The University of Texas M. D. Anderson Hospital and Tumor Institute at Houston and The University of Texas Environmental Science Park (now Science Park).



**1988:** Name changed to The University of Texas M. D. Anderson Cancer Center.

THE UNIVERSITY OF TEXAS  
MD ANDERSON  
CANCER CENTER  
*Making Cancer History®*

**1996:** The phrase Making Cancer History® began to be used with the logo and in advertising following the Texas Legislature’s approval of patient self-referral to MD Anderson.

## Feelings behind the words

What does Making Cancer History® really mean? Here’s what a few MD Anderson cancer survivors had to say:

### Victoria Johnson

“Making Cancer History means putting everything we have into research, into therapies, into providing quality of life for cancer survivors. MD Anderson has been able to do that for me very successfully.”

### Jaime Ramirez

“It means that one day, real soon, people no longer will know what cancer is. There will be no more suffering, amputations or other difficulties related to cancer. I’m looking forward to that day.”

### Janice Duplessis

“Making Cancer History means hope and survivorship for me and for the many other people who come to MD Anderson.”

### Jason Connelly

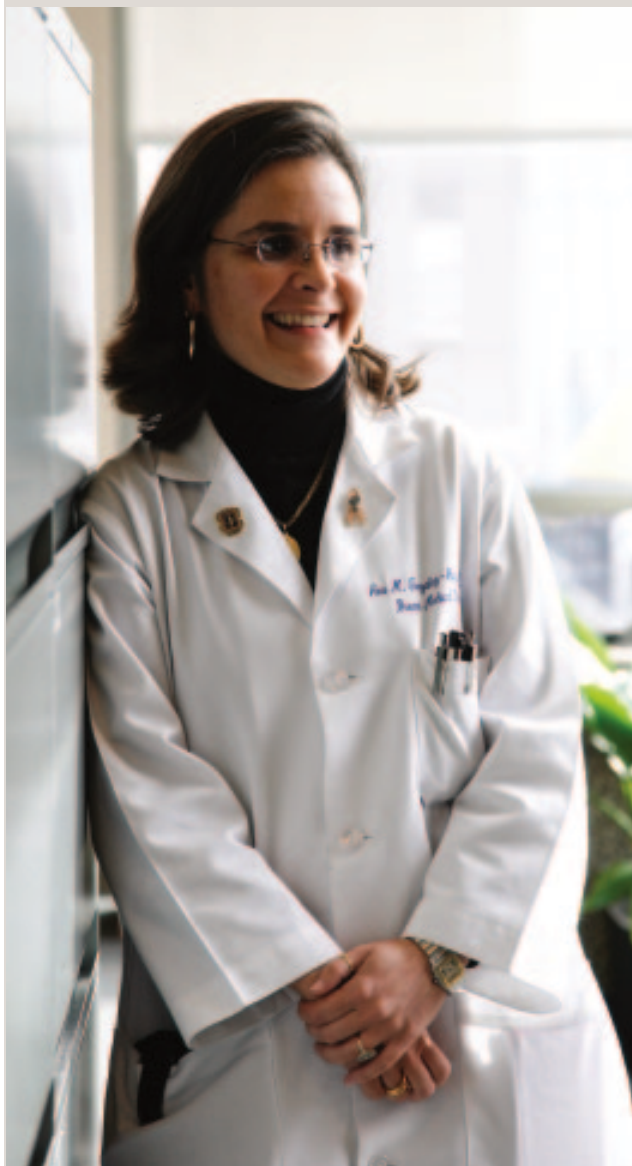
“It means saving my life three years ago after I was diagnosed with stage IV metastatic melanoma.”

THE UNIVERSITY OF TEXAS  
MD Anderson  
~~Cancer Center~~

Making Cancer History®

**2010:** Introducing MD Anderson’s new logo.

# FRONTLINE



**Ana Gonzalez-Angulo, M.D.**

## STUDY SHIFTS ASSESSMENT OF CERTAIN BREAST CANCER PATIENTS

Early-stage breast cancer patients with HER2-positive tumors one centimeter or smaller are at significant risk of recurrence of their disease, compared to those with early-stage disease who do not express this aggressive protein.

In the first large study to analyze this population, results represent a shift in the way women with early-stage HER2-positive breast cancer should be assessed for risk of recurrence and considered for treatment, says the study's senior author, Ana Gonzalez-Angulo, M.D, associate professor in MD Anderson's departments of Breast Medical Oncology and Systems Biology.

"Our findings show that women with early-stage HER2-positive breast cancer have a 23 percent chance of recurrence if the patient did not receive trastuzumab-based therapy. In contrast, the five-year survival rate of all women with such early-stage breast cancer is more than 90 percent," Gonzalez-Angulo says.

"The findings indicate that physicians need to consider offering these women Herceptin-based therapy in the post-operative, or adjuvant, setting."

Current guidelines call for no additional therapy after surgery and radiation if tumors are less than 5 millimeters. Herceptin-based adjuvant therapy should be discussed with patients if the tumors are from 6 millimeters to 10 millimeters, Gonzalez-Angulo explains.

Herceptin, also known as trastuzumab, is a monoclonal antibody that latches on to these proteins and inhibits tumor growth.

"The risk of recurrence was much higher than we suspected," says Jennifer Litton, M.D., assistant professor in MD Anderson's Department of Breast Medical Oncology, and an author on the study. "With this study, we now have evidence to discuss with our HER2-positive patients with even the smallest of tumors. Herceptin alone or combined with chemotherapy should be strongly considered as adjuvant therapy. This data should also encourage this subset of patients to be included in ongoing clinical trials with HER2-targeted therapies."

**THE RESEARCH WAS FIRST PRESENTED AT THE CRTC-AACR SAN ANTONIO BREAST CANCER SYMPOSIUM IN DECEMBER 2008 AND PUBLISHED ONLINE IN NOVEMBER 2009 IN THE JOURNAL OF CLINICAL ONCOLOGY.**



**Michael Wang, M.D.**

## AN ADVANCE FOR MULTIPLE MYELOMA PATIENTS

The second-generation proteasome inhibitor carfilzomib is showing noteworthy response rates and low levels of adverse side effects among multiple myeloma patients in a Phase II clinical trial.

The updated data from the 17-site study focuses on patients with relapsed or resistant multiple myeloma who have received one to three prior therapies, but not the drug bortezomib, the original proteasome inhibitor.

“These findings are truly an advance for patients with multiple myeloma,” says Michael Wang, M.D., associate professor in the Department of Lymphoma/Myeloma at MD Anderson and lead author on the study. “This is an incurable, challenging disease with devastating consequences. While new agents are extending life expectancies, they often have adverse side effects, including severe neuropathy. Carfilzomib is showing good response rates, with an improved side effects profile.”

Neuropathy is peripheral nerve pain or numbness that can become debilitating enough to halt treatment.

**REPORTED IN DECEMBER 2009 AT THE 51ST ANNUAL MEETING OF THE AMERICAN SOCIETY OF HEMATOLOGY.**

## TEAM OF TWO ONCO-PROTEINS CRUCIAL STEP IN METASTASIS

Researchers have discovered a key molecular mechanism for the deadly transition of non-invasive breast cancer into invasive disease.

This transition is recognized as a crucial step in metastasis, the spread of cancer to distant organs that causes 90 percent of all cancer deaths.

Researchers have shown that the protein 14-3-3 $\zeta$  teams with the oncoprotein ErbB2, also known as HER2, in a two-hit process to convert normal mammary cells to invasive cancer cells, says Dihua Yu, M.D., Ph.D., professor in MD Anderson’s Department of Molecular and Cellular Oncology.

In addition to identifying this key step, Yu notes the findings also provide a biomarker to identify high-risk patients who may benefit from more aggressive treatment before their non-invasive breast cancer converts to invasive disease.

Yu and colleagues previously showed that 14-3-3 $\zeta$  is over-expressed in many other cancer types, like lung, liver, uterine and stomach cancers. “Our findings might have broader implications relating to the mechanism of invasion and metastasis in other types of cancer,” Yu says.

**REPORTED IN THE SEPT. 9, 2009, EDITION OF THE JOURNAL CANCER CELL.**





**Subrata Sen, Ph.D. (left), and Jin Wang, Ph.D.**

### BLOOD TEST MAY DETECT PANCREATIC CANCER

A blood test for four small molecules abnormally expressed in pancreatic cancer may be a promising route to early detection of the disease, says Subrata Sen, Ph.D., associate professor in MD Anderson's Department of Molecular Pathology and senior author on the study that provided this discovery.

Sen and colleagues are working with the Early Detection Research Network of the National Cancer Institute. Their goal is to develop expanded studies with larger sample sizes that will test the molecular markers associated with different grades and stages of pancreatic cancer.

Currently, there is no accurate, non-invasive way to detect the disease, the fourth-leading cause of cancer-related deaths in the United States. Fewer than 5 percent of patients survive five years.

**REPORTED IN THE SEPTEMBER 2009 EDITION OF THE JOURNAL CANCER PREVENTION RESEARCH.**

### COMBINED THERAPIES SHOW PROMISE IN SMALL CELL LUNG CANCER

Treating limited stage small cell lung cancer with a combination of accelerated high-dose radiation therapy and chemotherapy has shown encouraging results, opening the door to larger scale investigation.

"While still early, these may be the most important study findings for limited stage small cell lung cancer in the past decade," says Risuko Komaki, M.D., professor in the Department of Radiation Oncology, program director of Lung Cancer Research and Thoracic Radiation Oncology and the study's lead author. "This research is important because it achieved a high level of control of the disease while minimizing damage to the esophagus."

Researchers at MD Anderson and their colleagues developed this new study to find a way to increase the level of radiation during concurrent chemotherapy without increasing damage to normal tissue.

This study has been adapted by a new randomized intergroup trial — including the Radiation Treatment Oncology Group and the Southwest Oncology Group, among others — that will enroll 700 patients in multiple sites across the country. This research will compare three radiation dose levels, fractionation and treatment duration times while they are getting the same concurrent chemotherapy.

**REPORTED IN NOVEMBER 2009 IN AN ORAL SESSION AT THE ANNUAL MEETING OF THE AMERICAN SOCIETY FOR RADIATION ONCOLOGY.**





**Anna Wilkinson, Ph.D.**

### WHAT PREDICTS SMOKING RISK FOR MEXICAN-AMERICAN YOUTH?

Two recent studies have revealed the influence that movies and susceptibility can have on smoking among Mexican-American youth.

The first was a three-year study of 1,286 Mexican-American adolescents, who were ages 11-13 at the start. Researchers found that the percentage of new experimenters increased from about 5 percent, among those with little or no exposure, to nearly 30 percent, for those who saw up to 600 smoking scenes in movies.

In the second study, researchers examined several factors that increase the likelihood of experimenting with cigarettes. They found that those deemed susceptible to trying cigarettes at the start of the study were over two times more likely to experiment by the end of the study than those who were not considered susceptible.

"Susceptibility to smoking is a measurable characteristic that predicts the transition to experimentation and smoking. Our results suggest that prevention efforts tailored to an adolescent's susceptibility status may be more effective among Mexican-American youth," says senior author Anna Wilkinson, Ph.D., assistant professor in MD Anderson's Department of Epidemiology.

Only 15 percent of those committed to never smoking at the start of a longitudinal study experimented with cigarettes over three years of follow-up. Over the same time, 45 percent of those who were deemed susceptible at first went on to experiment.

**BOTH STUDIES WERE REPORTED IN THE DECEMBER 2009 ISSUE OF CANCER EPIDEMIOLOGY, BIOMARKERS AND PREVENTION, A JOURNAL OF THE AMERICAN ASSOCIATION FOR CANCER RESEARCH.**

### RACIAL DISPARITIES IN RADIATION THERAPY FOR EARLY-STAGE BREAST CANCER

Black women are less likely than white women to receive radiation therapy after a lumpectomy, the standard of care for early-stage breast cancer, according to a recent study by researchers at MD Anderson.

In this study, the largest of its kind and the first to examine such racial disparities in radiation therapy, the researchers reviewed the Medicare records of more than 37,000 patients diagnosed with early-stage breast cancer in 2003.

Of the 37,305 women who underwent a lumpectomy for their breast cancer, 34,024 were white and 2,305 were black. Overall, 74 percent of the white women received radiation therapy after their lumpectomy; in contrast, 65 percent of the black breast cancer patients received the same treatment.

"The use of radiation after lumpectomy is considered to be the standard of care for women with invasive breast cancer, as clinical trials have demonstrated that it both reduces the chance of recurrence and improves the chance of survival," says Thomas Buchholz, M.D., professor and chair of the Department of Radiation Oncology at MD Anderson and the study's senior author. "While there are some breast cancer patients, such as those over age 70, with significant co-morbidities for whom radiation would not be appropriate, this discrepancy remained consistent when specifically looking at patients under the age of 70."

"Until further research is conducted, we may only speculate about the underlying reasons why black and white women are not receiving radiation at the same rate," says Grace Li Smith, M.D., Ph.D., a postdoctoral fellow in MD Anderson's Department of Radiation Oncology and the study's first author.

"These questions will be important subjects of future study. As a medical community, we need to identify and eliminate any obstacle prohibiting all women from receiving necessary care for their breast cancer," Smith says.

She hopes that results from the study may prompt physicians and patients to work together to overcome some of the barriers to treatment.

"Physicians may be able to help patients identify specific barriers to their care and overcome such obstacles," Smith says. "Or, if there are concerns or misconceptions about radiation treatment, patients themselves may play a role by becoming educated about the value of radiation after lumpectomy and helping to disseminate this information into their communities."

**THE RESEARCH WAS FIRST PRESENTED AT THE 2008 AMERICAN SOCIETY OF CLINICAL ONCOLOGY BREAST CANCER SYMPOSIUM AND PUBLISHED IN THE DECEMBER 2009 ISSUE OF CANCER.**



# Pathology:

## Investigating the nature of cancer

By Erika Hargrove

**No MD Anderson patient bypasses pathology. Without the knowledge that this science provides there can be no solution — no diagnosis, no course of treatment, no cure.**

Simply put, pathology is the branch of medicine that deals with the nature of disease, especially the structural and functional changes it causes in the body.

Though seldom seen by the patient, pathologists take the first look at a tumor and draw on their education, expertise and the latest technology to evaluate what they discover.

They help answer the all-important questions for clinicians and other health care providers: Does the patient have cancer? What type of cancer? What stage? What treatments might work?

### UNSUNG HEROES? TO SAY THE LEAST

“We’re often challenged because many people simply don’t know what we do,” says Janet Bruner, M.D., professor and chair of the Department of Pathology. “Outside of medicine, people aren’t knowledgeable, but even inside of health care, many don’t have a good understanding of our role.”

Bruner attributes this to the fact that in medical school there isn’t a pathology rotation that introduces future doctors to the field. “So although head and neck surgeons also learn to deliver babies, they may never observe pathologists at work.”

Although he had extensive experience observing pathologists in all different areas, Garrett Walsh, M.D., professor in the Department of Thoracic and Cardiovascular Surgery and head of Perioperative Enterprise, agrees that this is not the case for all surgeons.

He and his colleagues in the Division of Surgery have a great deal of respect for the diagnostic abilities of MD Anderson pathologists, who have a direct impact on most surgical procedures.

◀ **Moishia Wright, medical technician II in the Section of Cytopathology, is processing body cavity fluid to concentrate cells for cytopspin preparation, which helps the pathologist localize the cells in a smaller area.**



MD Anderson surgeons often request a “frozen section” consult from a pathologist while in surgery. During this process a mass is surgically removed from a patient and a portion of it is frozen, cut, stained and placed on a slide for analysis — all while the patient is on the operating table. The pathologist’s analysis tells the surgeon how much of the cancer has been removed and the possibility of its recurring.

“We see very rare things here... things that some hospital pathologists only see once or twice in a lifetime.”

— Janet Bruner, M.D., chair of the Department of Pathology

Bruner, who has served at MD Anderson since 1984 and has been chair of the Department of Pathology since 1999, says the institution is one of the most interesting places in the world to practice her specialty.

“We see very rare things here, like synovial sarcoma, a soft tissue cancer that most often occurs in the joints and tendons; things that some hospital pathologists see once or twice in a lifetime.”

#### UNIQUE CASES CALL FOR UNIQUE APPROACHES

After becoming department chair, Bruner decided to specialize pathology, much like MD Anderson’s clinics are specialized.

“Our pathologists and clinicians realized that this subspecialization would create experts in our field and truly benefit the patients,” Bruner says. “Now, we have pathologists for almost every type of cancer. We have pathologists who diagnose breast cancer all day and others who look at brain tumors all day.”

Other comprehensive cancer centers also have moved to this model, and additional large hospitals across the nation are quickly following, she says.

The department’s Immunohistochemistry Lab, which uses a novel staining process to label abnormal cells, takes “specialized” to the next level.

“The histology technicians who work in this lab process about 450 slides a day,” says Kaye Barr, laboratory manager. “These are specialized readings that offer a deeper level of detail. While many of our pathologists can diagnose cancer in the liver, immunohistochemistry can tell us where the cancer originated and what type of treatment it might respond best to.”

Pam Puig, department administrator, adds that immunohistochemistry speaks to the “personalized treatment” element of the MD Anderson mission and belief that one person’s cancer is truly unique — and, therefore, so should be the course of treatment.



**Janet Bruner, M.D., chair of the Department of Pathology, carefully examines brain tissue received from the operating room. It will be frozen and cut for analysis. Within 20 minutes, she will call the surgeon and tell him her findings.**



**Top:** Candice Watkins (right), senior clerk in the Histopathology Lab, receives a frozen section specimen and request from Maria Ortega, perioperative nursing assistant, who works in the operating room. These specimens are delivered to the Frozen Section Lab to be processed and read by pathologists. **Bottom:** Janet Quinones, supervisor in the Immunohistochemistry Lab, loads slides into the BondMax Stainer. The machine can run up to 250 different types of tests for immunohistochemistry.





**Nichole Cooper, pathology referral specialist in Surgical Pathology Services, processes and documents materials received through MD Anderson's second opinion consultation service.**



## A TESTAMENT TO EXPERTISE

MD Anderson pathologists also provide consultations, the global demand for which signals that the institution is a leader in the field.

According to Sherrie Jackson, laboratory manager for Surgical Pathology Services, more than 30,000 requests for diagnoses are received each year from patients, physicians, hospitals and cancer centers around the world.

Two kinds of requests arrive — from patients who want to come to MD Anderson and, therefore, must have a pathologist review their cancer diagnosis first; or from patients or physicians who are requesting a second opinion from the pathology team, but have no intention of transferring their care here.

“Our team receives approximately 140 to 160 outside cases each day,” Jackson says. “I see it as a testament of our professionals being some of the best in the world.”

Immunohistochemistry takes “specialized” analysis of a patient’s cells to a deeper level of detail, telling pathologists what type of treatment a certain cancer might respond best to.

## HOW DOES THE FUTURE LOOK?

As the profession progresses, the future of pathology looks bright.

“I’ve seen tremendous growth since I arrived here 26 years ago,” Bruner says. “At that time, there were 15 pathologists. By 1999, there were 30. Today we have 60. We’ve grown because MD Anderson has grown, but also because there’s a greater research component now, which is extremely important.”

The work of Bogdan Czerniak, M.D., Ph.D., professor in the Department of Pathology and chief of the Section of Genitourinary Pathology, is one example of original research being carried out. His studies involve fundamental genetic mechanisms of bladder cancer.

The Department of Pathology also oversees analysis of fluid and tissue samples that are part of MD Anderson’s clinical trials. And when it comes to national meetings and conferences, the Division of Pathology and Laboratory Medicine consistently submits the highest number of presentations and abstracts among its colleagues. Working to continue this trend is one of Bruner’s goals.

Though MD Anderson’s Department of Pathology is one of the best, she recognizes that there is always room for improvement.

“As a department head, I want to ensure that we’re not lacking when it comes to leveraging technology to our advantage and that of our patients,” she says. “We’re no longer tied to the microscope. As a profession, we use the Internet and other digital technology to provide diagnosis and recommend treatments that are in accordance with personalized cancer care. This is where our profession is rapidly moving, and MD Anderson pathologists must aggressively move in this direction also.”



Once materials submitted through the second opinion consultation service have been verified and processed, Lanetha Kellum, supervisor in Surgical Pathology Services, places them in the subspecialty service box for the appropriate pathologist to review.

## Pathology dissected

By Erika Hargrove

**Pathology is one of four departments in the Division of Pathology and Laboratory Medicine. Within the department there are four major areas.**

**Cytopathology** provides diagnostic laboratory service for the early detection of cancer and tumor staging. The team of cytotechnologists and cytopathologists, who are specialized to identify cancerous cells and microorganisms, play an extremely important role in cancer prevention. The Cytology Lab processes several types of samples, including gynecologic (Pap smears) and non-gynecologic samples (body cavity fluids, urines, bronchial and peritoneal washings) and fine needle aspirations (FNAs) from various body sites.

The Pap smear is the most well-known screening test for cervical cancer, according to Shobha Patel, laboratory manager for cytopathology. This technique was developed in 1940, and the test helped reduce the death rate from cervical cancer by 70 percent over the next 50 years. The recent addition of molecular genetic testing for high-risk human papillomavirus (HPV) in 2003 has helped triage the treatment of women at risk for cervical cancer.

Introduced in 1984, FNA is a cost-effective and minimally invasive procedure that has revolutionized several aspects of patient care, such as its use with endoscopic bronchial ultrasound in the staging of lung cancer patients, thereby decreasing the need for mediastinoscopy and open lung or lymph node biopsy.

**Histopathology laboratories** provide the technical support for processing tissue specimens submitted to the department from surgery or from the various outpatient clinics. These specimens must be grossly identified and described, and then put through a process of fixation, embedding in paraffin and finally, cutting and staining prior to delivery to the pathologists for review and diagnosis

The frozen section service aids surgeons during their cases. A specimen can be taken from a patient, prepared on a slide within 20 minutes or less and diagnosed by a pathologist, all while the patient is on the operating table. This reading helps the surgeon determine if enough of the cancerous mass has been removed and the chances of the disease recurring in one or more places. Material submitted for permanent sectioning and review is available for the pathologist within days of the patient's surgery and provides a comprehensive interpretation of all specimens removed during the surgery.

**The Immunocytochemistry Laboratory** processes requests for ancillary staining of specific markers in tissue. The results of these stains are interpreted by the pathologist and used to differentiate diagnoses or to provide prognostic information to help determine treatment plans for patients.

**Surgical Pathology Services** includes support services that are responsible for receiving, logging and tracking material received from outside facilities requesting pathology review, as well as processing requests for specialized molecular and genetic testing on pathology specimens.



A technologist processes specimens for liquid-based Pap smears by using the BD PrepStain™ Slide Processor, which prepares up to 40 slides at one time. The group processes up to 48 slides a day.



Shobha Patel, laboratory manager in the Section of Cytopathology, loads the BD PrepStain™ Slide Processor, which prepares and stains slides so Pap smears can be evaluated.



Xin Zhang, medical technician II in the Section of Cytopathology, stains slides with organic dyes so pathologists can distinguish cellular detail and morphology.



# Found in translation

Unique grants translate into hope for patients

By Lori Baker

Imagine a cancer treatment so promising someone travels 5,000 miles to MD Anderson to receive it.

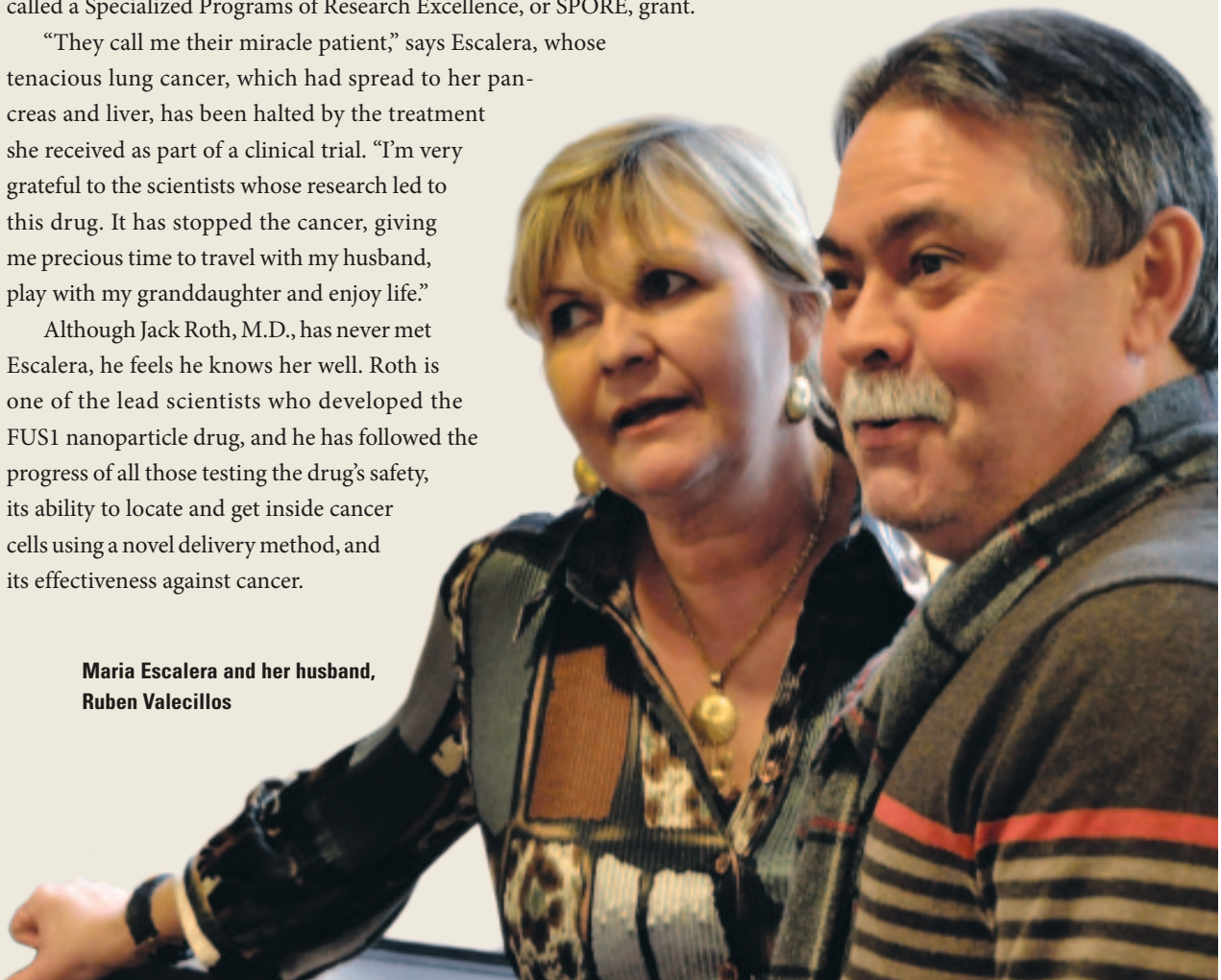
That person is Maria Escalera.

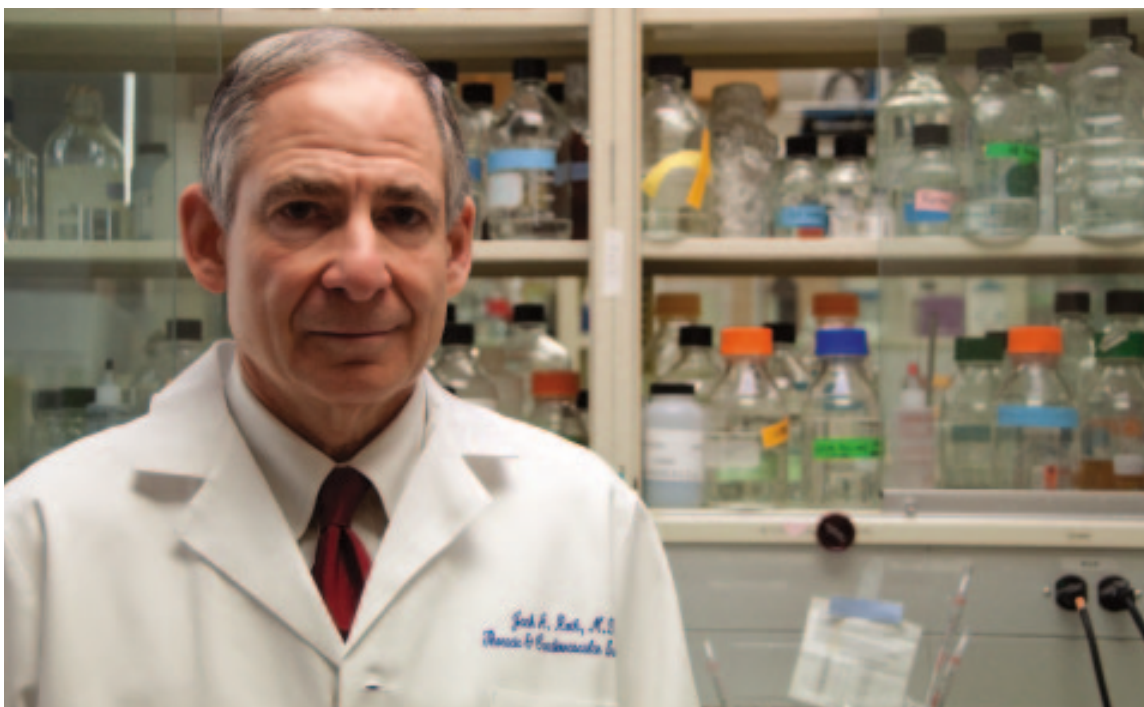
That treatment is an experimental gene therapy drug called FUS1 nanoparticle. Escalera got to MD Anderson from her home in Venezuela by airplane. The drug got to the clinic by way of a unique type of funding called a Specialized Programs of Research Excellence, or SPORE, grant.

“They call me their miracle patient,” says Escalera, whose tenacious lung cancer, which had spread to her pancreas and liver, has been halted by the treatment she received as part of a clinical trial. “I’m very grateful to the scientists whose research led to this drug. It has stopped the cancer, giving me precious time to travel with my husband, play with my granddaughter and enjoy life.”

Although Jack Roth, M.D., has never met Escalera, he feels he knows her well. Roth is one of the lead scientists who developed the FUS1 nanoparticle drug, and he has followed the progress of all those testing the drug’s safety, its ability to locate and get inside cancer cells using a novel delivery method, and its effectiveness against cancer.

**Maria Escalera and her husband,  
Ruben Valecillos**





**Maria Escalera is benefiting from the SPORE-funded research of Jack Roth, M.D., who, along with colleagues at MD Anderson and UT Southwestern, discovered a gene that prompts cancer cells to commit suicide.**

“Drs. David Stewart and Charles Lu, both in the Department of Thoracic/Head and Neck Medical Oncology, are supervising the clinical trial. I don’t directly interact with patients in the trial to avoid any chance of bias,” says Roth, professor in the Department of Thoracic and Cardiovascular Surgery and director of the W.M. Keck Center for Innovative Cancer Therapies at MD Anderson. “Ms. Escalera is one of several patients whose cancer has responded to the therapy, which provides evidence the drug produces anti-tumor activity.”

“Our team has been working on gene therapy for 20 years, and the last 10 years we also have been perfecting using tiny hollow spheres — called nanoparticles — as a new way to deliver the drug to patients whose cancer has spread,” Roth continues. “Seeing them benefit from our efforts after so many years is extremely rewarding.”

Roth says the drug wouldn’t have been developed without the financial support provided by the SPORE grant and philanthropic funding.

#### FILLING A FUNDING GAP

In the early 1990s, leaders at the National Cancer Institute wanted to provide more support for translational research, which focuses on moving basic research findings to patients, as well as moving clinical observations to the lab for exploration. The problem was that this type of research didn’t fit well with the funding mechanisms in place.

So, in 1992 NCI created SPORE grants targeted for translational research projects in a specific type of cancer. Each grant supports at least four projects that represent different areas of translational research, such as screening, prevention, diagnosis and treatment. Another important aspect of SPORE grants is that they require a collaborative approach — bringing many minds together to work on a project — which was a unique concept at the time.

It was Roth’s collaboration with John Minna, M.D., at The University of Texas Southwestern Medical Center, that resulted in securing the lung cancer SPORE grant for both institutions in 1996.

Since then, MD Anderson has become the top recipient of SPOREs, garnering 20 percent of all these highly coveted grants. The 12 SPOREs at the institution are in bladder, brain, breast, endometrial, head and neck, leukemia, lung, lymphoma, melanoma, ovarian, pancreatic and prostate. Together, they represent more than \$23.3 million for translational research projects this year.

Four new approaches, funded by MD Anderson’s most recent SPORE grant, hold the promise of more effective and gentler treatments for lymphoma and chronic lymphocytic leukemia patients.



**Faye Johnson, M.D., Ph.D., is Maria Escalera's oncologist and monitors her care in the SPORE clinical trial.**

“MD Anderson has a long history of conducting translational research in many of the areas we fund. In addition, when it comes to participants for clinical trials, its patient population is better than perhaps any other institution's in the country.”

— James Doroshow, M.D., director of the Division of Cancer Treatment and Diagnosis, National Cancer Institute

#### THE MD ANDERSON DIFFERENCE

What has made MD Anderson so successful in obtaining SPORE grants? There are several factors, but according to a SPORE expert at the NCI, the institution is well positioned to compete for these grants because of its commitment to translational research.

“MD Anderson has a long history of conducting translational research in many of the areas we fund,” says James Doroshow, M.D., director of the Division of Cancer Treatment and Diagnosis, which oversees the SPORE program at NCI. “In addition, when it comes to participants for clinical trials, its patient population is better than perhaps any other institution's in the country.”

The caliber of MD Anderson scientists is another important factor, since at least four investigators working on the proposed SPORE projects must have a proven scientific track record, as evidenced by having previously secured other grants.

“Many of our scientists have been successful in obtaining funding for their individual research endeavors,” says Provost and Executive Vice President Raymond DuBois, M.D., Ph.D. “This makes our applications even more attractive to the SPORE review committees when several of these accomplished faculty come together to work on the translational research projects.

I believe another reason for our success is because we've invested in many of the resources required to conduct leading-edge research.”

#### TRANSLATING IDEAS INTO TREATMENTS

The lung SPORE is one example where the dollars have translated the ideas of several great minds into treatments that now help people like Escalera.

Escalera was diagnosed with small cell lung cancer four years ago in Venezuela. She had heard that MD Anderson was the best place for cancer treatment, so the distance didn't stop her from coming here.





## MD Anderson in alignment from pathology to bioinformatics

“I have a very strong faith in God and an equally strong desire to live so I can spend as much time as possible with my family,” Escalera says. “I believe I’m doing so well because of my faith and will, but also because of my wonderful doctor.”

“Small cell lung cancer tends to grow more quickly and is more likely to spread,” says Faye Johnson, M.D., Ph.D., assistant professor in the Department of Thoracic/Head and Neck Medical Oncology and Escalera’s oncologist. “When Ms. Escalera first arrived, her lung cancer had already spread to her pancreas, so we were pleased that she responded to traditional chemotherapy.”

Unfortunately in 2007, Johnson discovered the lung cancer had spread to Escalera’s liver. This time, the chemotherapy didn’t produce the same results.

But there was still hope thanks to Roth and his collaborators.

“We began exploring gene therapy because we were not satisfied with the results achieved by surgery, radiation and chemotherapy, especially when the cancer had spread,” Roth says. “We had two main objectives: identify a gene that would prompt cancer cells to commit suicide, and find a way to deliver that gene so it could locate and infiltrate the cancer cells wherever they had spread in the body without harming normal cells.”

### FINDING A GENE AND A DELIVERY SYSTEM

According to Roth, the SPORE’s emphasis on collaboration brought together the strengths of MD Anderson’s scientists and UT Southwestern’s scientists to tackle the issue. Together, they found the gene they were looking for: FUS1. Through yet another collaboration with scientists at Baylor College of Medicine, they discovered the delivery system: encasing the gene in tiny balls of specially created fat, called biodegradable nanoparticles.

In addition to committing significant resources into a large number of highly specialized services for scientists, MD Anderson has developed expertise in diagnostic imaging and biostatistics and bioinformatics, two specialties that have taken on greater importance as more and more research involves staggering amounts of data.

“Even our approach to treating cancer — which revolves around specific multidisciplinary disease sites — works in our favor, since this also is how the SPORE grants are set up,” says Robert Bast, M.D., vice president for translational research, and principal investigator on MD Anderson’s ovarian SPORE. “Not only are our oncologists experts in breast or prostate or brain cancer, but other specialists who support them — such as pathologists or radiologists — also focus on a specific cancer site.

“So, when the NCI looks to fund teams that have the best chance of turning their ideas about lung cancer into treatments, the fact that we have experts who work on nothing but lung cancer gives us a big boost,” Bast says.

Nanoparticles are tiny spheres that have a talent for finding tumors, because they are positively charged and cancer cells are negatively charged. Once attached to the cancer cell membrane, the nanoparticles dissolve, and the genes they are transporting move inside the cancer cell and begin producing a protein that kills the cell. However, the same protein is harmless in normal cells.

It was a long road before the treatment was available for patients, but the timing was right for Escalera.

“Dr. Johnson had mentioned the clinical trial before, but I declined because the drug needs to be injected every 21 days, which was difficult since we lived in Venezuela,” Escalera says. “But when the chemotherapy quit working, I was ready to do whatever was needed to beat the cancer.”

Escalera began the FUS1 nanoparticle treatment on May 18, 2009, and all indications show her cancer has been halted.

“MD Anderson has long believed in the promise of translational research, and current advances in biomedical research offer more opportunities than ever before,” DuBois says. “So, we’ll continue to invest in this important area of research, as well as be good stewards of the SPORE funding we receive.”

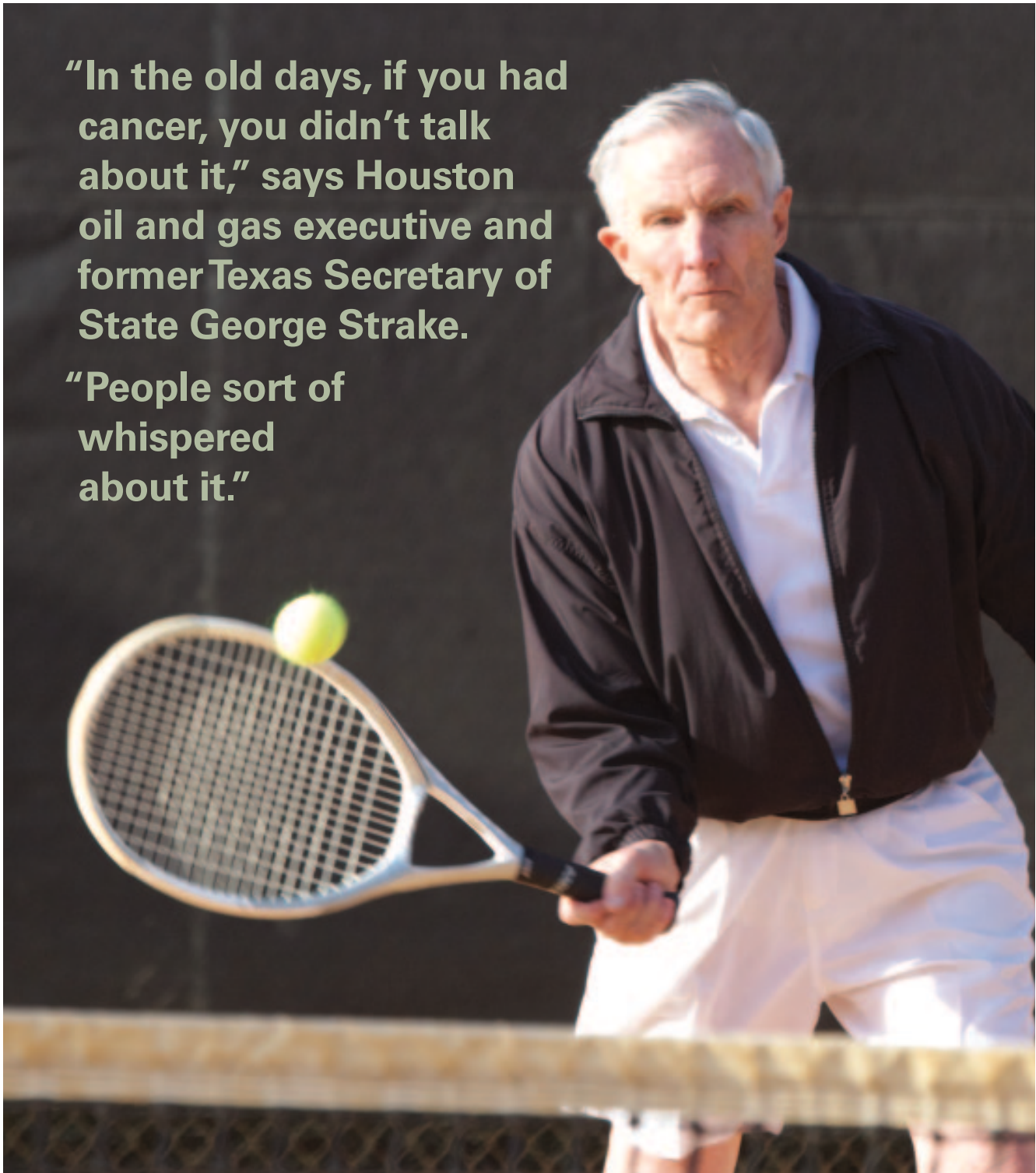
# Enlightened choices

By Mary Brolley

Experts collaborate, then recommend individualized prostate cancer treatment

**“In the old days, if you had cancer, you didn’t talk about it,” says Houston oil and gas executive and former Texas Secretary of State George Strake.**

**“People sort of whispered about it.”**



But secrecy has never been Strake's style.

So when a biopsy in December 2008 indicated he had prostate cancer, Strake didn't go into hiding. He didn't panic.

"I've always said that worry is man's least productive emotion — not to be confused with preplanning," he says. "I try to keep my cool."

That's what he did, talking to family and trusted friends, then plunging into research on prostate cancer. He even read the exhaustive "Guide to Surviving Prostate Cancer," by Patrick Walsh, M.D., medical writer and professor of urology at Johns Hopkins University.

But, he says, the number of effective treatments — and possible side effects — was daunting. How to wade through them and choose the right option for him?

Prostate cancer will strike one in six men in the United States. More than 190,000 were diagnosed with the disease in 2009.

With medical advances, survival rates are encouraging. Five-year survival is close to 100 percent and 15-year survival is 76 percent, yet prostate cancer is still the second leading cause of cancer death in men.

### SEVERAL GOOD CHOICES

Searching for answers, Strake made an appointment with Deborah Kuban, M.D., professor in the Department of Radiation Oncology and director of the Multidisciplinary Prostate Cancer Clinic at MD Anderson, a clearinghouse of sorts for men facing prostate cancer.

Five years old, the clinic attracts an ever-growing number of patients eager to have a team of experts take an unbiased look at their cases.

For early prostate cancer, patients have several choices for treatment, with similar cancer-free outcomes and survival, Kuban says.

Options include open and robotic surgery, external beam radiation, proton therapy and radioisotopic implant. There is "watchful waiting," also called active surveillance, and newer treatments under study, such as high-intensity focused ultrasound and cryotherapy, or freezing.

Each treatment has different short- and long-term side effects and complications that will likely affect a patient's quality of life, Kuban says.



**Hallway conference: Deborah Kuban, M.D. (left), radiation oncologist, Jeri Kim, M.D., associate professor in the Department of Genitourinary Medical Oncology, and Curtis Pettaway, M.D., professor and surgeon in the Department of Urology, discuss a patient's case.**

### CLINIC SHEDS LIGHT ON OPTIONS, ENCOURAGES FEEDBACK

Created to foster openness and collaboration for the benefit of men facing this disease, the clinic and its staff are determined to be responsive to patients' needs.

When a 2006 survey revealed that patients were interested in having a practical and comprehensible Internet site, they got one. When they asked for a step-by-step itinerary of their clinic visit, they got a "visit map" and a "treatment map."

Clinic staffers also developed a teaching packet that contains a standard set of information for all patients that explains the options.

To encourage patients to follow up with their care team, Advanced Practice Nurse Lydia Madsen is the "point person" for every patient at the beginning and end of his clinic visit.

A typical appointment includes a visit with Madsen, a resident or a fellow and two physicians. Once the team has reviewed each patient's case, the physicians confer, then decide on a joint recommendation for treatment.

Before they leave the clinic, patients receive a letter detailing the physicians' consultation and recommendations. "Sometimes there's not one best treatment," Kuban says. "We rule out those that won't work and give them a list of best options."





**Advanced Practice Nurse Lydia Madsen speaks with Raymond Clark of West Monroe, La.**

#### AFTER THE HUDDLE, AN EXPERT RECOMMENDATION

Strake was impressed with his clinic visit. “Three experts talked to me in turn, then they huddled up and gave me a recommendation.”

He chose radiation therapy, which involved a 7½-week course of daily weekday visits to the main campus’ Radiation Treatment Center.

Kuban was flexible with him, allowing him to delay treatment until after a hunting trip and a long-planned anniversary cruise.

Strake came to know many of the clinic staff, and even a year later can reel off the names of employees in a range of areas from valet parking to reception to treatment. The daily treatments also fostered camaraderie among the “band of brothers” undergoing radiation at the same time. “The other guys were great. It was a real conglomeration,” he says.

Because he continued working, Strake was grateful for the ease and speed of his daily treatments. “My appointments were at 9 a.m., and I was back in the office by 10 a.m.,” he remembers.

#### COLLABORATING TO HELP PATIENTS

Working closely with MD Anderson specialists in urology and medical oncology has enriched Kuban’s experience and practice, she says. “Because you’re face-to-face, it’s helped me understand what my colleagues deal with. We get to know each other, and it’s helped improve relationships.”

There’s growing national interest in this multidisciplinary model in academic medical centers, she says.

And the clinic is an important step toward personalized cancer care. “We take the patient’s cancer into account, of course, but also other medical problems he may have, as well as his lifestyle, to direct him to the best treatment or treatments.”

Perhaps because they are listened to and treated as equal decision makers in their treatment, a high percentage of clinic patients — nearly 80 percent — decide to participate in clinical research trials.

For his part, Strake is a true believer in the open, multidisciplinary approach pioneered at the clinic. “If you can narrow down the options by yourself, fine. But I didn’t know how to go about it.”

As for the experts who studied his case and gave him a recommendation, “I got the feeling they were interested in what was best for me,” he says. “That really sold me.”

## Clinical trials ... in an investigator's words

**Christopher Logothetis, M.D., professor and chair of the Department of Genitourinary Medical Oncology at MD Anderson, is passionate about the importance of clinical trials to the future of prostate cancer treatment. He spoke with Conquest about their promise and the practical issues involved.**

Clinical trials complement clinical care and are designed to inform research and develop new ways to make patients' lives better.

They span the continuum of cancer treatment, from prevention through treatment, and they always serve three masters: the patient, the science and the development of effective therapies to treat the disease.

### **First, the patient.**

The trial must always be in the individual interest of the patient. Patients must be well informed, and we must ensure that the risk of the trial is proportional to the risk posed by the disease.

### **Second, science.**

All new studies should benefit not just the patient, but also should inform physicians on how to approach patients with similar characteristics — that is, patients with the same diagnosis and prognosis.

### **Third, drug development.**

We are careful to give treatments a chance to prove themselves. Do they work? Do they not?

Some of the categories of new treatment development include identifying biomarkers to tell us how to derive the most benefit for patients. These markers may predict who will develop cancer, or who will — or won't — respond to certain drug therapies. These are Phase I trials.

In Phase II trials, we're trying to identify subsets of patients who respond well to certain types of therapies: chemical, gene, molecular, surgical or radiation.

And finally, in Phase III, we design trials to assess the amount of improvement and measure the degree of benefit to patients nationally. In that way, we can have a national influence.

### **What types of patients participate in clinical trials?**

Most prostate cancer patients at MD Anderson are willing to participate. They've been educated and informed. They know that the trial is in their personal interest, and that it will benefit the next generation.

They feel they're part of a bigger community addressing this issue. In fact, patients and their advocates are a big driver of the research agenda.

At MD Anderson, some notable trials for prostate cancer include these, which are offered through the Multidisciplinary Prostate Cancer Clinic:

- An active surveillance of three groups of patients: patients with true low-risk disease, patients who chose surveillance, and patients who should not undergo active treatment due to significant co-morbidities, such as severe heart disease and a limited lifespan.
- An observational study of continuous oral dosing of abiraterone in hormone-resistant prostate cancer patients.



**Christopher Logothetis, M.D., is chair of the Department of Genitourinary Medical Oncology.**

Abiraterone is designed to decrease the production of testosterone, a hormone that plays a role in causing prostate cancer to grow.

- Two trials with Sutent® (sunitinib) — one for patients prior to prostatectomy (surgical removal of the prostate) and one prior to radiation treatment. Sutent blocks pathways that control important events, such as the growth of blood vessels essential for the growth of cancer.

Clinical trials offer hope to patients, provide crucial data for research and are essential to finding answers in our quest to understand, treat and, someday, beat cancer.

**For more information on clinical trials at MD Anderson, visit the Internet site at [www.clinicaltrials.org](http://www.clinicaltrials.org).**

# TRANSFORMING CANCER CARE

## EVERY CANCER PATIENT HAS A STORY.

And many were invited to share them as MD Anderson launched the public phase of its \$1 billion Making Cancer History®: The Campaign to Transform Cancer Care at the Hilton Americas-Houston on Feb. 18.



**Nadia Jones, a 5-year-old being treated for rhabdomyosarcoma in the Children's Cancer Hospital at MD Anderson, was the youngest to share her upbeat attitude and story at the campaign launch.**

By Sandi Stromberg

During an evening that celebrated the institution's dedication to its mission, eight patients — ages 5 to one month shy of 80 — stood on highlighted platforms placed at intervals around the room. Each speaker concluded his or her story by drawing a red slash through the word “cancer” that appeared on a projection screen, symbolically eliminating cancer from his or her life.

The star-studded affair was hosted by Phyllis George, mistress of ceremonies, and featured Barbara Padilla, a soprano who sang several operatic arias and shared her story of surviving Hodgkin's lymphoma.

With the promise of changing the way cancer is perceived and managed throughout the world, MD Anderson has already raised \$780 million from community leaders and benefactors, foundations and corporate supporters.

“Hopes are that the \$1 billion mark will be reached with help from the public by December 2011, which is one year ahead of schedule,” says Patrick Mulvey, vice president for Development.

### WHY NOW?

“Now is the time for this campaign because of a convergence of opportunity and need,” says John Mendelsohn, M.D., president of MD Anderson. “We now have the knowledge and the scientific tools to identify abnormal genes and molecules in an individual patient's cancer. With this information, we can select therapies that have a high probability of working by targeting those abnormalities.”

This ability is due in large part to what we have learned from the Human Genome Project, which was completed nearly a decade ago. Projections are that in 2012, a person's whole genome can be sequenced in a week for \$1,000, Mendelsohn says.

That's the opportunity. The need is for funding.



“We have dozens of translational and clinical investigators and fabulous new technologies. Together, they help us apply our knowledge more quickly and select the right therapy for the right patient at the right time,” Mendelsohn says. “Currently, this research is not paid for by insurance companies or by Medicare. Philanthropic funding is crucial to our success.”

#### WHY INVEST IN CANCER CARE?

Naturally, donors want to know that the money they give will be spent in a productive way to do something important, meaningful and innovative.

“If your goal is to advance health care in a disease that the World Health Organization says is going to be the number one killer on the planet next year,” Mendelsohn says, “and if your goal is to invest with people and institutions that have a track record, then I think The University of Texas MD Anderson Cancer Center is a good choice.”

*For additional information on supporting the capital campaign, please contact Patrick Mulvey, vice president for Development, 713-792-3450, or log on to the Internet site at [www.makingcancerhistorycampaign.org](http://www.makingcancerhistorycampaign.org).*



**MD Anderson President John Mendelsohn, M.D., stops to chat with Jaime Ramirez, a 22-year survivor of osteosarcoma and employee at MD Anderson, who shared part of his story at the campaign launch.**

## Blueprint for transformational breakthroughs

A group of virtual institutes forms the centerpiece of the campaign. Through them, MD Anderson faculty leaders have created a new approach to cancer research designed to bring together people from diverse departments and disciplines in programs and centers of excellence that focus on the entire continuum of cancer care, from prevention to survivorship. Funds raised in the campaign are essential to launching these institutes and driving concerted progress. The five institutes include:

#### **The Duncan Family Institute for Cancer Prevention and Risk Assessment**

Established through a \$35 million contribution from the Dan L. Duncan Family Foundation, this institute will break new ground in addressing genetic and lifestyle risk factors that lead to cancer.

#### **The Institute for Basic Science**

This institute will focus on areas most critical to advancing fundamental knowledge about cancer genetics and genomics; epigenetics; stem cell and developmental biology; structural biology; environmental and molecular carcinogenesis; biological pathways; and inflammation and cancer.

#### **The Institute for Cancer Care Excellence**

This institute has created a program focused on finding ways to enhance the quality of cancer care, ensure the safety and well-being of patients, measure the effectiveness of treatment with accurate clinical outcomes data and reduce costs of care.

#### **The Institute for Personalized Cancer Therapy**

The goal of this institute is to select individualized cancer therapy for each patient based on the genetic and molecular abnormalities in that particular patient's cancer.

#### **The Red and Charline McCombs Institute for the Early Detection and Treatment of Cancer**

This institute was launched in 2005 with a \$30 million gift from the Charline and Red McCombs family of San Antonio. It focuses on translating basic science discoveries about the genes that cause cancer and the molecular pathways that promote its growth, survival and metastasis into new diagnostic tests and treatments targeting key genes and pathways.

# Managing Symptoms throughout the cancer journey

By Laura Prus



**Amy Haworth, clinical nurse in the Supportive Care Center, takes time each day to check in with patients on how treatments for their symptoms are working.**

## It takes a village to provide symptom management, Amy Haworth says.

As a clinical nurse in the Supportive Care Center at MD Anderson, she collaborates with physicians, counselors, nurses, social workers, therapists, pharmacists, dietitians and chaplains who enhance the quality of life for patients.

Recently, she worked alongside other members of the Supportive Care Center's team to ease the conflicting emotions of a newly diagnosed patient with stage IV lung cancer and his wife. The young and active couple was stunned at the diagnosis, and doctors knew it would be a tough, uphill battle. For weeks, the pair came to the center so the patient could receive relief from physical symptoms, such as pain.

MD Anderson social workers and psychiatric nurses, as well as groups from the community, also developed a relationship with the couple and helped them learn to cope with their anxieties, eventually alleviating a great deal of their distress.

Also known as palliative care, supportive care seeks to improve quality of life by reducing the physical and emotional burdens of illness through symptom management, supportive counseling and advanced care planning.

Though the Supportive Care Center often is mistaken as a direct route to hospice care, in reality it is a service available to most patients at any point during their treatment.

"MD Anderson focuses effectively on the treatment of cancer," says Eduardo Bruera, M.D., professor and chair of the Department of Palliative Care and Rehabilitation Medicine. "The Supportive Care Center addresses the needs of cancer patients so they can take advantage of treatment."



**In the hallway of the Supportive Care Center, Eduardo Bruera, M.D., chair of the Department of Palliative Care and Rehabilitation Medicine, and Marcel Lake, manager of the department's clinical protocol administration, discuss a research project for symptom management.**

## GETTING REFERRED

Patients come to the center, affiliated with the Department of Palliative Care and Rehabilitation Medicine, upon referral from their physician. Although sometimes physicians recognize that a diagnosis or treatment will be particularly difficult and refer a patient right away, it often is not until patients' cancers have progressed that physicians send them to the center. However, symptoms are managed most effectively when the process is ongoing, starting at diagnosis.

Center services are available to patients at any time during their treatment. "Since most cancer patients will experience one or more difficult symptoms, almost everyone who goes through treatment will benefit from the center," says Kay Swint, a certified hospice and palliative nurse and the department's clinical administrative director. "Being referred by your oncologist is independent of your prognosis. We improve performance status so you can continue with treatment."

Center staff work to educate both patients and physicians about their services. "There is a two-step education process," says Marcel Lake, manager, clinical protocol administration. "Physicians often may not think of referring patients to the center, so informed patients are better positioned to ask their doctors about it."

Once referred, patients generally visit every four weeks and develop a strong relationship with the center. Adjustments in their care are made and attainable goals are set at each visit. These efforts, among others, are a way of "keeping positive and hopeful during the difficult time of treatment," Bruera says.

## 'WE CAN MAKE A DIFFERENCE'

Many of the patients referred to the center receive treatment for multiple symptoms. "We start with what's driving a patient's distress and often see them multiple times," Swint says. "If we can focus on one or two key symptoms, the other symptoms sometimes reduce without requiring additional medication."





**Among the village of health care professionals who work in the Supportive Care Center are (clockwise from top left) Debra Castro, outpatient clinical nurse, Kay Swint, certified hospice and palliative nurse and the department's clinical administrative director, and Sriram Yennu, M.D., assistant professor.**

Most commonly, the center sees patients who suffer from fatigue, pain, a lack of appetite, anxiety or depression. "It's a comprehensive approach, and we look at all symptoms, physical and emotional," Bruera says.

Family members also can benefit and seek comfort from their exhaustion and concerns. "A lot of family members say, 'You are the first person to ask me how I'm doing,'" Swint says. "We see that we can make a difference by addressing an unmet need."

Unlike other groups that focus primarily on the disease, the center is patient- and family-centered. "Our big focus is on the patient and their family," Lake says. "There are different components of a person. Someone is not just a cancer patient, but also may be a mother, a daughter and a wife."

Therefore, the care for each patient is carefully considered. When patients arrive at the center, many symptoms are examined and open communication is encouraged.

Symptom assessments serve as effective guidelines, but understanding the patient's point of view is imperative. "What we do is in response to the patient's perspective," Swint says. "We're there to support them. They set the agenda for us."

## COMMUNICATION AND RELATIONSHIPS ARE KEY

The center's welcoming environment helps soothe patients even before they receive relief from their symptoms. Designed with floors that look like hardwood, soft lighting, chairs for family members, beds for outpatients and contrasting wall colors, the area provides a calm atmosphere.

"It's a place where we've thought about comfort, and it's somewhere where people can easily talk with each other," Swint says, noting the importance of communication between patients and members of the supportive care team. "We're good communicators. We help patients feel comfortable talking about cancer, and they tell us their needs and fears."

The Supportive Care Center takes a comprehensive approach, helping patients deal with both physical and emotional symptoms, such as fatigue, pain, lack of appetite, anxiety or depression. Family members also can benefit and seek comfort from their exhaustion and concerns.

Relationships are a key component to the success of the center. By forming a bond with the various center team members, patients find a safe place where they can discuss their emotions and receive relief from their symptoms. Staff members benefit as well, as relationships help them best assess a patient's needs.

"We can use the relationship to get to the core of what the patient is feeling," Haworth says. "If someone says he's fine, we can sometimes tell from his facial expression that he's not."

Building the relationship takes time but is a rewarding experience. "It's an honor to sit, listen and witness someone's story," Haworth says. "It's a privilege to work with these patients. It's very personal, and there's a trust people put in you."

## RESEARCH CONTINUES

Since the department's Section of Symptom Control and Palliative Care opened in 2000, many services have been added for patients.

It has expanded from an original outpatient center and mobile consultation service to include a 12-bed inpatient unit. A Supportive Care Center in the Division of Pediatrics also has been added. "We're the largest symptom control and palliative care program in the United States," Bruera says.



**Other health care professionals in the center include Barbara Jensen (top), outpatient clinical nurse, and Bianca Calderon, clinical pharmacy specialist.**

New ways to improve the quality of patients' lives are continually being sought. "We do research on how to better measure what patients are feeling and how they communicate," he says. "We're continually changing how we evaluate the effectiveness of treatments and finding new ways to address problems. Methods are very different from what they were 10 years ago."

One thing, however, has not changed. The village of physicians, counselors, nurses, social workers, therapists, pharmacists, dietitians and chaplains continue to offer hope and an improved quality of life to those patients burdened by the physical and emotional symptoms of cancer.



# CANCER BRIEFINGS



**Hank Aaron (left) and Bob Schieffer**

## Baseball great Aaron latest 'Living Legend'

For two decades, an MD Anderson event has been the talk of the town.

The fundraising luncheon, A Conversation With a Living Legend<sup>SM</sup>, has continuously attracted larger-than-life personalities and overwhelming support for the institution. Since its inception in Dallas in 1990, the event has raised more than \$11 million for cancer research and patient care programs.

Most recently, Dec. 3 at the Hilton Americas Hotel in Houston, Hall of Famer Hank Aaron shared personal stories from his 23-year Major League Baseball career. Former Houston Astro Jeff Bagwell introduced Aaron and CBS News reporter Bob Schieffer conducted the on-stage interview with the legend.

Former CNN chairman and CEO and MD Anderson Board of Visitors member Tom Johnson was emcee of the event, which raised \$406,400.

A few months earlier, former first lady Laura Bush and veteran radio journalist Cokie Roberts took the stage at the 20th annual A Conversation With a Living Legend in Dallas. That event, held Sept. 18 at the Hilton Anatole, raised \$961,961.

Aaron joined Sherry Lansing, Mary Matalin and James Carville as Houston Living Legends. Dallas event Living Legends have included such notables as Nolan Ryan, Tom Landry, Jack Nicklaus, Margaret Thatcher, Carol Burnett, President George H.W. Bush and Rudolph Giuliani. A Conversation With a Living Legend also has been held in Corpus Christi and Washington, D.C., and upcoming events are planned in Atlanta and San Antonio.



## New choice for cancer patients in Turkey

Vehbi Koc Foundation (VKF) American Hospital and MD Anderson are expanding cancer care services in Istanbul and Turkey through a new radiation treatment center that opened in January at VKF American Hospital.

The MD Anderson Radiation Treatment Center in Istanbul at American Hospital offers a full range of radiation therapies. It is the first MD Anderson radiation treatment facility outside the United States that fully replicates the institution's standards of therapies, delivered by physicians trained in Houston.

"American Hospital has been offering outstanding medical and surgical oncology services to patients in Turkey," says Evren Keles, M.D., CEO of American Hospital. "Through our work with MD Anderson on advanced radiation therapy, we will continue to raise the bar and deliver the full spectrum of cancer care-related services to patients close to home."

The two institutions are collaborating to meet a critical need in Turkey for expertise in radiation therapy that addresses the rising incidence of cancer, especially in lung and breast cancers.

MD Anderson has clinical oversight of all radiation treatment delivery at the center, which is directed by Ugur Selek, M.D., a former MD Anderson fellow and currently an adjunct associate professor.



**Ugur Selek, M.D. (seated in center), leads the MD Anderson Radiation Treatment Center in Istanbul at American Hospital. Members of the team (standing left to right) are Aydin Ozkaynak, Vidan Alban, Firat Akin, Kenan Oren, Yucel Saglam and Sahika Mert (seated on bench).**

## Attacking obesity with 'CAN DO' attitude

CAN DO Houston (Children and Neighbors Defeating Obesity) will expand its community-based efforts with a \$360,000 grant from the Robert Wood Johnson Foundation's Healthy Kids, Healthy Communities initiative.

MD Anderson will oversee and manage the grant, which was one of only three awarded in Texas and 41 nationally, chosen from more than 500 proposals. Efforts will focus on three Houston neighborhoods: Magnolia Park, Sunnyside and Independence Heights.

CAN DO Houston was formed in 2008 by Houston organizations — including MD Anderson's Center for Research on Minority Health — concerned about childhood obesity and its health effects.

By tapping volunteers and existing sources of funds, CAN DO Houston focuses on improving nutrition, physical activity and healthy behaviors for children ages 4-12. The program's centerpiece is establishing a tie between a school and a city park.

## Katy center adds medical oncology services

Making quality cancer care more convenient for those who would like to stay close to home, MD Anderson recently expanded services at its Regional Care Center in Katy, a west Houston suburban community.

Located on the campus of CHRISTUS St. Catherine Hospital, the center provided radiation treatment services when it opened in late 2007. Expansion this February added medical oncology and hematology consultation, outpatient chemotherapy, laboratory and pharmacy services, and an on-site business center.

The center also offers nutrition education, assessment and counseling, as well as social work counseling, including support groups and community resources.

The medical staff is led by Gregory Chronowski, M.D., assistant professor in the Department of Radiation Oncology, and Nikesh Jasani, M.D., and Sunil Patel, M.D., both assistant professors in the Department of General Oncology.

MD Anderson has six regional care centers in the greater Houston area. For more information, check online at [www.mdanderson.org/regionalcare](http://www.mdanderson.org/regionalcare).

# MOVING FORWARD: KEVIN OLSON

By Mary Jane Schier

Terry Olson's most cherished holiday decorations are paper-plate angels made by several MD Anderson nurses while her 6-year-old son Kevin was in isolation, recovering from a stem cell transplant in December 2000.



“We hang those paper angels inscribed with messages of hope every Christmas,” says Olson, an elementary school registrar who lives with husband Mike and their two sons in Austin, Texas.

Kevin's cancer journey began in February 1999 when he was diagnosed with advanced Wilms' tumor, an uncommon kidney cancer that had spread to his lymph nodes and into both lungs.

After surgery to remove his diseased right kidney and some lymph nodes, Kevin had radiation and chemotherapy. Additional aggressive chemotherapy did not destroy the metastatic tumors, leaving a dismal outlook.

“Our doctor in Austin arranged for us to go to MD Anderson to discuss having a stem cell transplant. The specialist told us the chances were low — perhaps only 5 percent — that Kevin would respond and survive,” Olson remembers.

Kevin's stem cells were collected, purged of cancer cells in a laboratory and then returned in a two-part infusion while he was in isolation. The goal was to help his body produce healthy blood components and reduce his risk for life-threatening infections.

Olson smiles when she recalls the day Kevin had his stem cells removed.

“I'll never forget Kevin with a big Tootsie Roll pop in his mouth, playing with a bag of Legos as his blood was withdrawn. Some adult patients undergoing similar procedures commented on how calm he looked,” she relates.

Kevin recovered faster than expected and went home two days before Christmas to celebrate with his father and brother Scott, who is two years older. The paper angels were hung carefully.

Today, Kevin is a sophomore at a magnet school for students who excel in science and mathematics. Turning 16 recently was a big milestone.

“I'm thinking about studying medicine so I can become a doctor and help lots of people. Hopefully, I can be an inspiration to others with cancer,” he says.

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